

New York State Department of Environmental Conservation

Registration ID: 9-0422-00005/00099

Facility DEC ID: 9-0422-00005



AIR FACILITY REGISTRATION CERTIFICATE

in accordance with 6NYCRR Part 201-4

Registration Issued to: U S DEPT OF ENERGY
1000 INDEPENDENCE AVE SW
WASHINGTON, DC 20585

Contact: ANNE M BIRD
WEST VALLEY DEMONSTRATION
PROJECT
10282 ROCK SPRINGS RD
WEST VALLEY, NY 14171-9799
(716) 942-4650

Facility: WEST VALLEY DEMONSTRATION PROJECT
10282 ROCK SPRINGS RD
WEST VALLEY, NY 14171-9799

Description:

1) The West Valley Demonstration Project (WVDP) constructed a Vitrification Facility (VF) to solidify liquid High Level Waste (HLW) into a borosilicate glass. The liquid HLW was mixed with glass forming chemicals, heated to a molten mixture in a Slurry Fed Ceramic Melter and subsequently poured into stainless steel canisters. The vitrification process generated NOx and SO2 gases that were abated using a selective catalytic reactor. Other operations supporting the melter operations also generated air emissions

2.) After the completion of HLW vitrification operations, the melter was shut down in September 2002. Consequently, all other associated air emission control sources were also shut down. The only air emission sources that continue to operate are (2) two identical 20.2 million Btu/hour heat input, Clever Brooks boilers. One is routinely operational, while the other is used for back-up/stand-by purposes. The boilers utilize natural gas as their main fuel, however, they both have the capability to burn #2 fuel oil

3) The radiological emissions from the facility which are subject to National Emission Standards for Hazardous Air Pollutants (NESHAPS) are regulated under 40 CFR, Part 61, Subpart H. Currently, WVDP has (6) six permits issued by the EPA. These permitted emission points continue to be routinely monitored

4) In order to avoid Title V requirements for major stationary source permitting, the facility elected to register and cap-by-rule. Subpart 201-7.3, Emission Capping by Rule requires that the facility keep annual facility-wide emissions of regulated air contaminants below 50 % of the major stationary source thresholds. Since the boilers are dual fueled, the air contaminants which would limit boiler operation for emissions to stay under the major facility thresholds are NOx and SO2

5.) Affected emissions must be tracked and calculations must be done on a 12 month rolling total basis. This requires that the calculations are done monthly and represent the total emissions for the previous 12 months. The calculation logs must be kept on site for a minimum of five years and made available to the Department for review during normal business hours. The tracking will assure the facility's continued eligibility for registration. In any situation where the provisions of this section have not been achieved or are not expected to be achieved, the source owner or operator shall promptly notify the Department.

6.) A responsible official will verify annually (starting one year from the effective date of the registration) that capped emissions have remained below the limits contained in item # 4 above in the previous one year period and the facility has operated in accordance with all applicable requirements of Part 201. Documentation of this annual verification must be kept on site and made available to the Department on request.

7.) All production records and corresponding emission calculations shall be kept on site for a minimum of five years. This information shall be made available to the Department upon request.

FINAL

03/22/2005

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8) As required by Federal regulation, 40 CFR, Part 60, Subpart Dc for the boilers, the facility must still submit semi-annual fuel supplier certifications for the sulfur content of any oil burned.

9) The facility has four (4) on-site diesel powered generators and one (1) diesel powered fire pump as follows: Permanent Ventilation System Generator (900 hp-600kW), Vitrification Generator (900 hp-600kW), Utility Room Generator (805 hp-500kW), Utility Room Expansion Generator (1635 hp-1250kW) and Diesel Fire Pump (85 hp-55kW). These power generating units and the fire pump each operate less than 500 hours per year. In accordance with Part 201-3.2(c)(6), they are exempt from permitting requirements.

Total Number of Emission Points: 2

Cap By Rule: No

Authorized Activity By Standard Industrial Classification Code:

9999 - NONCLASSIFIABLE ESTABLISHMENTS

Registration Effective Date: 03/22/2005

Registration Expiration Date: (Not Applicable)

This registrant is required to operate this facility in accordance with all air pollution control applicable Federal and State laws and regulations. Failure to comply with these laws and regulations is a violation of the Environmental Conservation Law (ECL) and the registrant is subject to fines and/or penalties as provided by the ECL.

LARRY SITZMAN
REGION 9 AIR POLLUTION CONTROL ENGINEER
270 MICHIGAN AVENUE
BUFFALO NY 14203-2999

This registrant is required to operate this facility in accordance with all air pollution control applicable Federal and State laws and regulations. Failure to comply with these laws and regulations is a violation of the ECL and the registrant is subject to fines and/or penalties as provided by the ECL. If ownership of this facility changes, the registrant is required to notify the Department at the address shown below using the appropriate forms and procedures within 30 days after the transfer takes place. The present registrant will continue to be responsible for all fees and penalties until the Department has been notified of any change in ownership.

IMPORTANT AIR FACILITY REGISTRATION INFORMATION

Issuance of this registration does not verify that the information which you provided is accurate or complete. Please be advised that this registration is contingent upon your being the owner and/or having the legal authority to use the described location and site for the purposes described in the application. In addition, you are responsible for obtaining any other permits and approvals that may be required and for complying with all other applicable State and Federal laws, rules, and regulations and any other applicable local ordinances.

1. Any facilities not capping by rule should keep adequate emissions records to demonstrate the facility is eligible for continued registration. In order to qualify for registration, the facility must comply with the "Emission Limitations" stated below.

2. If the facility has indicated it is capping by rule, it has determined the facilitywide potential to emit of any regulated air contaminant exceeds Title 5 permitting threshold values. At a minimum, any facility capping by rule shall comply with the following requirements listed below and also, all provisions of 6NYCRR section 201- 7.3 (hereafter referred to as this Section).

3. Whether capping by rule or not, the facility may be required to demonstrate registration eligibility during any future inspection by the Department.

Emission Limitations. In order to be eligible for registration, stationary sources must not emit more than the following quantities of emissions in every 12 month period: (1) 50 percent of the major stationary source thresholds for regulated air pollutants, (2) 5 tons of a single hazardous air pollutant, (3) 12.5 tons of any combination of hazardous air pollutants, (4) 50 percent of any lesser threshold for a single hazardous air pollutant that the Administrator may establish by rule and upon incorporation into state regulation, or (5) 5 tons of VOC for stationary sources seeking a cap to avoid Part 228 or Part 233 requirements

Record-keeping Requirements. The owner or operator must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Emission Control Equipment. The owner or operator of any facility which meets the criteria given in subdivisions 201 - 7.3 (h), (i) and (j) and uses air pollution control equipment to comply with an emissions cap shall operate and maintain such equipment in a manner consistent with good engineering practices. If such control equipment is required under any Part of this chapter and would limit emissions to a greater degree than what the thresholds established in this Section would allow, then the more stringent emission limitation applies. The owner or operator must monitor and record such process parameters as the Department requires, including but not limited to the following:

- (1) Information on equipment type and description, make and model, and emission units served by the emission control unit;
- (2) Information on equipment design, including where applicable: pollutant(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data (type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power output); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all emission unit test information; and
- (3) A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs, maintenance and any other deviations from design parameters.

Modifications. The owner or operator must apply for and obtain all necessary permits prior to commencing any physical or operational change which will result in any increase to the actual emissions which would exceed the emission limitations under subdivision 201 - 7.3 (e). Should the proposed modification to the facility result in actual emissions exceeding the emission limits set forth in subdivision 201 - 7.3(e), the facility will become subject to all applicable requirements that the owner or operator was capable of avoiding by complying with the requirements of this Section, except where a new emission cap is subsequently obtained in accordance with section 201-7.2 of this Title

Compliance. A responsible official will verify annually through a review of required records and totaling of emissions information, that the facility is eligible under this Subpart and has operated in accordance with all applicable requirements of this Section. In any situation where the provisions of this Section have not or are not expected to be achieved the source owner or operator shall notify the Department

(1) Failure to comply with any of the applicable provisions of this Section shall constitute a violation of this Part.

(2) Commencing on the first day following every 12 month period, any facility subject to this Section is subject to all applicable requirements, when either of the following conditions occur:

- (i) The facility exceeds any of the emission limits specified in subdivision 201 - 7.3 (e), or as applicable; or
- (ii) the owner or operator of the facility cannot demonstrate, through the use of the limitations and requirements described in subdivisions 201 - 7.3 (e), (g), (h), (i) of and (j) that the facility-wide emission totals for any 12 month period are below the emission limits as specified in subdivision 201 - 7.3 (e), as applicable